

Rec'd PCT/PT 17 MAR 2005

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



10/528183



(43) International Publication Date
1 April 2004 (01.04.2004)

PCT

(10) International Publication Number
WO 2004/027381 A3

(51) International Patent Classification⁷: C07K 16/00,
C12Q 1/68, G01N 33/53, C12N 5/06, A61K 39/00

(74) Agents: SPRATT, Gwendolyn, D. et al.; Needle & Rosen-
berg, P.C., Suite 1000, 999 Peachtree Street, Atlanta, GA
30309-3915 (US).

(21) International Application Number:

PCT/US2003/029267

(22) International Filing Date:

17 September 2003 (17.09.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/411,248 17 September 2002 (17.09.2002) US

(71) Applicant (for all designated States except US): UNIVER-
SITY OF UTAH RESEARCH FOUNDATION [US/US];
615 Arapen Drive, Suite 110, Salt Lake City, UT 84108
(US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) Date of publication of the International search report:
13 January 2005

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

WO 2004/027381 A3

(54) Title: METHODS AND COMPOSITIONS RELATED TO INHIBITING NUCLEAR ENVELOPE BREAKDOWN

(57) Abstract: Disclosed are compositions and methods for inhibiting nuclear envelope breakdown.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/29267

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : C07K 16/00; C12Q 1/68; G01N 33/53; C12N 5/06; A61K 39/00 US CL : 530/388.22; 435/6, 7.21, 326; 424/184.1 According to International Patent Classification (IPC) or to both national classification and IPC														
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 530/388.22; 435/6, 7.21, 326; 424/184.1 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet														
C. DOCUMENTS CONSIDERED TO BE RELEVANT														
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.												
A	STADE, K. et al. A lack of SUMO conjugation affects cNLS-dependent nuclear protein import in yeast. JOURNAL OF BIOLOGICAL CHEMISTRY. 20 December 2002, Vol. 277, No. 51, pages 49554-49561, see entire document.	1-63												
A	KUMAR, J.P. et al. Perturbing Nuclear Transport in Drosophila Eye Imaginal Discs Causes Specific Cell Adhesion and Axon Guidance Defects. Developmental Biology. 15 December 2001, Vol. 240, No. 2, Pages 315-325, see entire document.	1-63												
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.														
<table border="0"><tr><td>* Special categories of cited documents:</td><td>"T" Later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td></tr><tr><td>"A" document defining the general state of the art which is not considered to be of particular relevance</td><td>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td></tr><tr><td>"E" earlier application or patent published on or after the international filing date</td><td>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td></tr><tr><td>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td><td>"&" document member of the same patent family</td></tr><tr><td>"O" document referring to an oral disclosure, use, exhibition or other means</td><td></td></tr><tr><td>"P" document published prior to the international filing date but later than the priority date claimed</td><td></td></tr></table>			* Special categories of cited documents:	"T" Later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	"E" earlier application or patent published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family	"O" document referring to an oral disclosure, use, exhibition or other means		"P" document published prior to the international filing date but later than the priority date claimed	
* Special categories of cited documents:	"T" Later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention													
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone													
"E" earlier application or patent published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art													
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family													
"O" document referring to an oral disclosure, use, exhibition or other means														
"P" document published prior to the international filing date but later than the priority date claimed														
Date of the actual completion of the international search 15 December 2003 (15.12.2003)		Date of mailing of the international search report 08 JUL 2004												
Name and mailing address of the ISA/US Mail Stop PCT. Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230		Authorized officer E. Pierre Vander Vegt Telephone No. 571/272-1600												

INTERNATIONAL SEARCH REPORT

PCT/US03/29267

Continuation of B. FIELDS SEARCHED Item 3:
EAST; STN Medline, Embase, Biosis, Scisearch.
TERMS: Nup358, Nup153, COPI, RanBP2, nucleoporin